

REMARKS

The Examiner is thanked for the performance of a through search and for considering the references submitted by the Applicants in the Information Disclosure Statements filed on November 21, 2005, February 6, 2006, and March 15, 2006.

No claims have been amended, added, or canceled. Hence, Claims 1-20 are pending in the application.

I. REJECTIONS BASED ON THE CITED ART

A. INDEPENDENT CLAIM 1

Claim 1 has been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Fuller, U.S. Patent No. 5,870,757 (“FULLER”).

Claim 1 includes the features of:

...;
in response to said command, translating a plurality of operations including
said one or more file system operations into database commands; and
a database server executing said database commands, wherein the step of
executing includes:
....

It is respectfully submitted that FULLER does not teach or suggest the above features of Claim 1.

1. FULLER does not teach or suggest the feature of Claim 1 of translating a plurality of operations, which include the one or more file system operations, into database commands.

The Office Action asserts that FULLER describes the above feature of Claim 1 in col. 2, lines 7-55. This assertion is incorrect.

In col. 2, lines 7-17, FULLER describes that a journal, or log, is added to an Operating System (OS) file system. The log is managed by a device driver that is executing within the OS (see FIG. 2 – metatrans driver 32 is executing in the kernel portion of the OS). The log is used to record updates to the file system before the updates are applied to the file system itself. (FULLER, col. 2, lines 21-23.) The device driver is implemented in two layers within the kernel of the OS, where the upper layer receives calls to modify the file system and the lower layer records the updates in the log. (See FULLER, FIG. 2 and col. 2, lines 25-30.) The lower layer consists of a metatrans device that is composed of two sub-devices – the logging sub-device contains the log and the master sub-device contains the file system itself. (FULLER, col. 2, lines 30-37.) Finally, in col. 2, lines 38-55, FULLER describes how utilizing its techniques for logging updates to file systems improves the consistency of the file system across crashes and speeds up the mounting of the file system at boot time.

Significantly, however, neither the passage in col. 2, lines 7-55 nor any other passage of FULLER describes or even suggests the feature of Claim 1 of translating file system operations (which are expressly identified in a received command) into database commands. Contrary to the assertion in the Office Action, FULLER does not describe or suggest anything that is even remotely related, let alone equivalent to, the database commands that are featured in Claim 1.

For the above reasons, FULLER does not, and cannot possibly teach or suggest the feature of Claim 1 of translating a plurality of operations, which include the one or more file system operations, into database commands.

2. FULLER does not teach or suggest the feature of Claim 1 of a database server executing the database commands as part of nested transactions.

The Office Action asserts that in col. 4, line 64 to col. 5, line 15, FULLER describes the feature of Claim 1 of a database server executing database commands. This assertion is incorrect.

In col. 4, line 64 to col. 5, line 4, FULLER describes that its techniques for logging file system updates may be implemented in an environment where general-purpose computers may share programs and data and may be connected in a client-server arrangement. In col. 5, lines 5-15, FULLER describes a general-purpose workstation computer with reference to FIG. 1. However, a general-purpose computer as described in the context of FULLER is not a database server. Further, neither this passage nor any other passage of FULLER teaches, describes, or suggests the feature of Claim 1 of a database server executing database commands.

Significantly, the techniques for logging file system updates described in FULLER are implemented by device drivers executing in the kernel of an Operating System. (See for example FULLER, FIG. 2; col. 5, lines 16-27; col. 1, lines 18-19; and col. 2, lines 7-11.) The kernel of an Operating System, however, is not a database server. In fact, the term “database server” is not even recited in FULLER. To the extent that FULLER refers to an “MDD database”, it seems that the MDD database is simply a repository for storing device configuration and other state information for the purpose of providing persistence across Operating System reboots. (FULLER, col. 9, lines 4-6.) Significantly, the MDD database in FULLER is managed by device drivers in the kernel of the Operating System and NOT by a database server. (See for example FULLER, FIG. 2; col. 13, lines 25-27 and 39-42.)

In contrast, Claim 1 recites the feature of a database server executing database commands as part of nested transactions, where one or more file system operations have been translated into the database commands.

For the reasons given above, it is respectfully submitted that FULLER does not describe or suggest all features of Claim 1. Thus, FULLER does not anticipate Claim 1 under 35 U.S.C. § 102(b). Reconsideration and withdrawal of the rejection is respectfully requested.

B. INDEPENDENT CLAIM 10

Independent Claim 10 has been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by FULLER.

Claim 10 includes features similar to the features of Claim 1 discussed above. For this reason, the Applicants respectfully submit that Claim 10 is patentable under 35 U.S.C. § 102(b) over FULLER for at least the reasons given above with respect to Claim 1. Reconsideration and withdrawal of the rejection of Claim 10 under 35 U.S.C. § 102(b) is respectfully requested.

C. DEPENDENT CLAIMS 2-9 AND 11-20

Claims 2-9 and 11-20 have been rejected under 35 U.S.C. § 102(b) as allegedly anticipated by FULLER.

Each of Claims 2-9 and 11-20 depends from one of independent Claims 1 and 10, and thus includes each and every feature of the independent base claim. Each of Claims 2-9 and 11-20 is therefore allowable for at least the reasons given above for Claims 1 and 10. Further, each of Claims 2-9 and 11-20 introduces one or more additional features that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those features is not included at this time. Therefore, it is respectfully submitted that Claims 2-9 and 11-20 are allowable for the reasons given above with respect to Claims 1 and 10.

II. CONCLUSION

For the reasons set forth above, it is respectfully submitted that all issues raised in the Office Action have been addressed and that allowance of the pending claims is appropriate. Reconsideration of the present application in light of the remarks herein is respectfully requested.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary to make this reply timely filed, the Applicants petition for an extension of time under 37 C.F.R. § 1.136. If any applicable fee is missing or insufficient, throughout the pendency of this application, the Commissioner is hereby authorized to charge any applicable fees and to credit any overpayments to our Deposit Account No. 50-1302.

Respectfully submitted,
HICKMAN PALERMO TRUONG & BECKER LLP

Dated: July 7, 2006



Stoycho D. Draganoff
Reg. No. 56,181

2055 Gateway Place, Suite 550
San Jose, California 95110-1089
Telephone No.: (408) 414-1080 ext. 208
Facsimile No.: (408) 414-1076